

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions, and listings, of claims in the present application:

1. (Currently amended) An organic optoelectronic device comprising:
 - a first electrode;
 - a hole transport layer;
 - [a luminescent layer;]
 - an active layer;
 - an electron transport layer; and
 - a second electrode,wherein at least one of the layers selected from the group consisting of the hole transport layer, the active layer, and the electron transport layer, and combinations thereof, comprises a crosslinked molecularly doped polymer layer.
2. (Original) The organic optoelectronic device of claim 1, further comprising a charge injection layer.
3. (Original) The organic optoelectronic device of claim 1, further comprising a hole blocking layer.
4. (Original) The organic optoelectronic device of claim 1, wherein the first electrode comprises a transparent conductive oxide.
5. (Original) The organic optoelectronic device of claim 1, wherein the second electrode comprises a metal cathode.

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6. (Original) The organic optoelectronic device of claim 1, wherein the active layer is selected from light emitting layers, light absorbing layers, and electric current generating layers.

7. (Original) The organic optoelectronic device of claim 1, wherein the hole transport layer is the molecularly doped polymer layer and wherein a molecular dopant is selected from tertiary aromatic amines.

8. (Original) The organic optoelectronic device of claim 1, wherein the active layer is the molecularly doped polymer layer and wherein a molecular dopant is selected from metal (8-quinolinolato) chelates, quinacridone derivatives, and triaryl amine derivatives.

9. (Original) The organic optoelectronic device of claim 1, wherein the electron transport layer is the molecularly doped polymer layer and wherein a molecular dopant is selected from metal (8-quinolinolato) chelates.

Claims 10-24 (Canceled)